

GENERAL COMMUNICATION, INC.

Interest: Not identified.

Cellular Eligibility:

- The FCC should designate Block A as the "non-dominant carrier block" and preclude dominant cellular carriers (defined as any cellular carrier that covers more than 5 percent of the nation's population) from owning licenses in this block. This will ensure that dominant cellular carriers do not acquire 30 MHz licenses to limit competition. (4-9)
- The FCC should raise the 5 percent attribution standard to 20 percent; such a modification is especially appropriate for publicly traded companies and passive investors. (1-4)

GTE SERVICE CORPORATION

Interest: Manufacturer and local exchange and cellular service provider.

Cellular Eligibility:

- The FCC should use APC's "effective POP" standard in determining cellular eligibility so that cellular carriers may obtain PCS licenses if their percent cellular ownership multiplied by total cellular POPs is less than 20 percent of the POPs in the PCS MTA. (3-5)
- The FCC should clarify that cellular carriers may bid for PCS MTA and BTA licenses as long as they comply with the ownership limitation prior to initiating PCS service. (5-8)

Tax Certificates:

- The FCC should clarify that companies divesting cellular interests to comply with PCS eligibility rules (before or after bidding) may obtain tax certificates. (8-11)

IOWA NETWORK SERVICES, INC.

Interest: Interexchange carrier owned by independent LECs.

Band Plan:

- To allow designated entities to better compete with the 30 MHz MTA licensees, proposes allocating spectrum as follows:

Block A (30 MHz) MTA 1850-1865/1930-1945

Block B (30 MHz) BTA 1865-1880/1945-1960

Block C (10 MHz) BTA 1880-1885/1960-1965

Block D (10 MHz) BTA 1885-1890/1965-1970

Block E (10 MHz) BTA 2130-2135/2180-2185

Block F (10 MHz) MTA 2135-2150/2185-2200.

(5-11)

Cellular Eligibility:

- The FCC should not apply cellular/PCS ownership restrictions to rural telephone companies because such rules will hinder the ability of rural firms to form consortia to obtain PCS spectrum. (11-14)

KILLEN & ASSOCIATES, INC.

Interest: Management training and consulting firm.

Service Areas:

- Use of the Rand McNally market designations, in which Rand McNally claims copyright, will restrict the bidding process, lessen competition and increase auction costs. The FCC should consider using the MSA/RSA designations instead. (1-3)

McCAW CELLULAR COMMUNICATIONS, INC.

Interest: Cellular carrier.

Band Plan/Service Areas:

- The FCC should allow subdivision of PCS authorizations on a geographic and spectrum basis, in order to permit service providers to meet customer needs without artificial geographic and bandwidth constraints. (7-8)

Cellular Eligibility:

- The FCC should remove the cellular eligibility restriction because it ignores the realities of competition in the wireless marketplace, prevents cellular companies from competing in areas where their expertise and experience would be most beneficial, and would preclude cellular participation in national PCS consortiums if the FCC adopts its ill-advised combinatorial bidding proposal. (2-4)
- If the FCC nonetheless retains the eligibility restriction, it should allow cellular carriers to bid for PCS licenses as long as they comply with the ownership rules before initiating PCS service, as is consistent with cellular and mass media precedents. (5-6)

MCI TELECOMMUNICATIONS CORPORATION

Interest: Interexchange carrier.

Cellular Eligibility:

- The FCC should exclude the nine largest cellular carriers and their affiliates (those holding interests of 20 percent or more in cellular licenses that in the aggregate cover more than 10 percent of the nation's POPs) from eligibility to bid on licenses in one of the 30 MHz MTA blocks. (2-5)
 - ▶ Cellular licensees have been exempted from auctions for their cellular spectrum, providing them a substantial competitive advantage. (4)
 - ▶ The largest cellular providers often plan and cooperate with one another, leading to reduced competition. (4-5)
 - ▶ They also have a much lower "hurdle" rate in bidding for PCS licenses than new entrants. (5)
 - ▶ The nine largest cellular carriers have at least an incentive to collude tacitly in bidding on the two 30 MHz blocks to eliminate new competition. (5)

Power Limits:

- The FCC should increase the maximum permissible base station power to 1000 watts ERP (1600 watts EIRP). Retention of the 100 watt per carrier power limit (that is based upon "traditional" technology) will impede widespread cost effective deployment to lesser populated areas of the country. (7-8)
- The FCC should create an additional category of non-handheld subscriber devices with permissible transmit power of up to 12 watts ERP (20 watts EIRP), in order to give PCS licensees needed flexibility in meeting their customers' service requirements. (8-9)
- Ancillary fixed devices should also be authorized for 12 watts ERP (20 watts EIRP). (9-10)

Other:

- Attaches study entitled "Designing PCS Auction Rules to Encourage Competition" and Engineering Statement and Declaration of MCI engineer regarding proposed modification of PCS technical rules.

MEBTEL, INC.

Interest: Potential rural PCS provider.

Performance Requirements:

- To assist rural PCS providers to establish viable systems, licensees in the C and D blocks should be allowed 10 years to provide service to 1/3 of the BTA population and 15 years to provide service to 2/3 of the BTA population. (1-4)

Other:

- To assist rural PCS providers to establish viable systems, the FCC should license rural areas only after urban areas have been completely licensed so that rural providers may purchase equipment when the price has declined. (1-4)

MOTOROLA INC.

Interest: Equipment manufacturer.

Power Limits:

- To increase flexibility, Motorola supports increasing the base station ERP limit to 1000 Watts. (7-8)

Performance Requirements:

- In order to accommodate the broadest range of possible deployment scenarios, Motorola believes the FCC should consider alternatives to its current construction schedule, such as allowing licensees to specify their own construction timetables, and tempering the absolute forfeiture requirement to allow a licensee to demonstrate what services are being provided to the public. (5-6)

Interference Standards:

- The FCC should clarify the PCS-microwave interference rules since the text appropriately requires factoring in likely base station height, but the example in Appendix D does not, and the rules indicate that industry procedures for calculating PCS-microwave interference will be accepted, but the text states Longley-Rice propagation modelling will be required. (6-7)
- To limit problems with PCS base-to-base interference, suggests limiting power in one half of the channels to the mobile/portable power limits and limiting the corresponding channel to base power limits, thus creating a de facto (quiet) mobile to base band and a base to mobile band. This plan would also accommodate TDD technologies, which would, of course, be required to meet any RF exposure limitations. (8-9)
- Believes the emissions mask should be applied between adjacent PCS systems. (9-10)

CAI Standards:

- Believes the FCC should reconsider its decision not to mandate an industry-developed common air interface; Motorola believes ongoing industry effects could arrive at a standard by the end of 1994 and that adoption of such a standard would greatly improve the quality and interoperability of services for the public. (3-5)

Other:

- Section 99.24 should specify the relevant measurement bandwidth and whether the reference power is transmitter output power or effective radiated power. (10)
- Requests clarification of Section 99.235 as to what showings from manufacturers are required to meet the frequency stability limits. (10)

GEORGE E. MURRAY

Interest: African-American entrepreneur.

Band Plan:

- The current allocation plan creates channel blocks that are not commercially viable and that cannot be consolidated efficiently. (4-8)
- To encourage strategic alliances with Designated Entities and promote fairness, all spectrum should be allocated in 10 MHz blocks on the basis of BTA license areas coupled with auction rules that facilitate the aggregation process. (4-6, 7-10)

NATIONAL COMMUNICATIONS SYSTEM

Interest: Federal government office responsible for national security and emergency preparedness telecommunications.

CAI Standards:

- The FCC's order fails adequately to address how interoperability and nationwide roaming standards will be developed, given the decision to fragment the spectrum into many frequency blocks and different sized markets. (1-5)

NATIONAL TELEPHONE COOPERATIVE ASSOCIATION

Interest: National association of approximately 500 small local exchange carriers providing telecommunications services to rural America.

Service Areas:

- The FCC should allow voluntary partitioning of MTAs and BTAs, similar to what was permitted in the cellular context. Such partitioning would sanction agreements by which auction winners would assign portions of the market to rural telcos or other entities best able to serve local needs. (1-8)
- Partitioning would comply with Congressional directives to promote participation by rural telephone companies and rapid deployment of PCS to rural areas. (6-8)

Cellular Eligibility:

- The FCC should clarify that rural telephone companies with attributable cellular interests in overlapping cellular systems should be allowed to bid for Block D licenses and receive the preferences accorded other rural telephone companies bidding on that block. It is necessary to accord preferences to rural telephone companies with cellular interests to bring adequate and timely service to rural areas. (10-11)

Performance Requirements:

- Because the PCS build-out rules will discourage the participation of small companies, designated entities and those especially interested in serving rural areas, NTCA recommends revision of those rules to reduce the benchmarks to 70 percent in rural areas (*i.e.*, 21 percent after 5 years, 42 percent after 7 years, and 63 percent after 10 years). (8-9)
- The FCC should clearly articulate standards for waiver of the build-out rules before it conducts auctions for PCS. The CATV waiver rules can serve as a model. (9-10)
- Attaches PCS Comments of GVNW Inc./Management and study showing how the build-out requirements will operate in 7 MTAs and 10 BTAs.

NEXTEL COMMUNICATIONS, INC.

Interest: SMR service provider.

Band Plan:

- The decision to license 30 MHz, 20 MHz and 10 MHz spectrum blocks will create an inefficient regulatory and service market and hamper PCS development. (5)
- 30 MHz spectrum blocks are exorbitant and unnecessary and do not encourage efficient spectrum use. The record fails to identify any spectrum uses that require 30 MHz. (6,10)
- The FCC should create four 20 MHz blocks and four 10 MHz blocks for broadband PCS. Spectrum could be aggregated if necessary. (7)

Service Areas:

- The Commission should substitute Basic Trading Areas for Major Trading Areas as the PCS geographic service areas for all licensees and allow operators to create larger areas during the auction or through post-auction aggregation. (11)
- Vast service areas will result in delayed service to rural communities. Smaller areas are better suited to the technical and market characteristics of micro-cellular systems. (12,13)

NORTHERN TELECOM INC.

Interest: Equipment manufacturer.

Power Limits:

- The FCC should modify the base station power limit to 1000 Watts ERP in order to: (1) permit coverage of the large licensing areas adopted under the coverage rules; (2) meet the Budget Act's goal of service to rural areas; (3) allow deployment of new technologies like "smart antenna modules"; (4) avoid construction of unnecessary transmitters in low density areas (with extensive numeric exhibits detailing transmitters required to cover the US); and, (5) allow meaningful competition with existing cellular services. (6-17)
- Increasing the base station power level will not have any adverse consequences; interference potential can be minimized by supplementing the coordination table; a Moffit, Larson & Johnson study shows that increasing the power limit may actually decrease potential interference problems; and, the requested increase does not necessitate increased handset power. (17-21)

NYNEX CORPORATION

Interest: Regional Bell Operating Company.

Band Plan:

- The allocation of the 30 MHz and 10 MHz blocks in non-adjacent bands could impede the ability of carriers to provide subscribers ubiquitous service (or allow subscribers to roam) across systems operating in these bands. (6-9)
- To promote the interoperability of systems between and across frequency blocks, proposes modifying Section 99.202 as follows:

MTA blocks

Block A: 1850-1865 MHz paired with 1930-1945 MHz

Block D: 1875-1890 MHz paired with 1955-1970 MHz

BTA blocks

Block B: 1865-1870 MHz paired with 1945-1950 MHz

Block C: 1870-1875 MHz paired with 1950-1955 MHz

Block E: 2130-2135 MHz paired with 2180-2185 MHz

Block F: 2135-2145 MHz paired with 2185-2195 MHz

Block G: 2145-2150 MHz paired with 2195-2200 MHz.

(10-11)

Cellular Eligibility:

- FCC should permit cellular carriers to acquire two 10 MHz licenses within their cellular service area; alternatively, the FCC should "sunset" the aggregation limits after auctions are complete. (12-13)
- To facilitate cellular carriers' and designated entities' participation in consortia, the attribution standard should be legal control. (13-15)
- The record in this proceeding provides an ample basis for eliminating the cellular separate subsidiary rules. (16-22)

ORGANIZATION FOR THE PROTECTION AND ADVANCEMENT OF SMALL TELEPHONE COMPANIES

Interest: Association of more than 430 independently owned and operated telephone companies serving rural areas in the U.S. and Canada.

Cellular Eligibility:

- The FCC should not apply its cellular eligibility rules to rural telephone companies. (3-8)
 - ▶ Congress has recognized the importance of rural telephone companies' participation in the provision of advanced services. (3-4)
 - ▶ The cellular eligibility requirements will deny many rural telephone companies the opportunity to secure a PCS license. The cumulative treatment of small interests in cellular partnerships will render many rural telcos ineligible, especially since the best way to serve rural customers may be for a number of rural telcos (who also have cellular interests) to work together. Such entities clearly do not have market power and thus should not be barred. (5-8)

PACIFIC BELL AND NEVADA BELL

Interest: Bell Operating Companies.

Band Plan:

- The Commission should reduce the number of PCS licensees. With two cellular operators and one established SMR competitor, a maximum of three new service providers will be viable in small metropolitan areas or in rural areas. (2)

Power Limits:

- The FCC should not impose a specific limit on radiated power for PCS base stations as it could preclude new phased array technology. If a limit is necessary, the permitted power should be increased to 1900 watts EIRP per RF channel. Microwave stations would continue to receive interference protection through other safeguards. (3,4)

Performance Requirements:

- The requirement to ultimately provide access to PCS service to 90 percent of the service area's population is too burdensome, particularly considering the restrictive power limitations. (5)

PACIFIC TELECOM CELLULAR, INC.

Interest: Cellular licensee.

Cellular Eligibility:

- The cellular eligibility restrictions should be modified to restrict only entities with actual control of overlapping cellular systems. (2-5)
 - ▶ A threshold limitation based upon control, rather than an arbitrary percentage interest in a cellular licensee, would better satisfy the FCC's objective of preventing potentially anti-competitive behavior. (2-3)
 - ▶ Because, as the FCC has recognized, cellular carriers are uniquely qualified to provide PCS, they should not be unnecessarily excluded from the PCS licensing process. (4-5)

PACTEL CORPORATION

Interest: Holding company for PacTel wireless subsidiaries.

Power Limits:

- Supports a maximum power level of no less than 1500 watts EIRP. (1-7)
 - ▶ The 100 watt (EIRP) maximum power limit adopted by the FCC will reduce PCS system flexibility, increase PCS infrastructure costs and inhibit population coverage. (1-4)
 - ▶ Believes no maximum EIRP levels should be imposed as good system design sets a natural limit on transmitter power. However, 1500 watts is the minimum needed to achieve parity between PCS systems and cellular providers. (5-6)
 - ▶ Higher maximum power levels would pose no risk to consumers or microwave licensees. (6-7)

PCS ACTION, INC.

Interest: PCS Action is a group of major potential new service providers and manufacturers. (1-2)

Band Plan:

- Urges Commission to permit lower band licensees seeking to aggregate 40 MHz of spectrum to lease or otherwise obtain portions of spectrum from other lower band licensees. In order to effectively deploy PCS systems, 40 MHz of spectrum will be necessary. If lower band licensees have to use upper band spectrum, PCS services will be more costly and take longer to deploy because dual-band equipment will be expensive and has not yet been developed. In addition, microwave users in the two bands have different characteristics which will further delay and increase the cost of PCS. One way to aggregate 40 MHz would be to permit a designated entity to split the 20 MHz block in a BTA into two 10 MHz blocks that can be separated and sublicensed to 30 MHz block owners. (2-12)

PEGASUS COMMUNICATIONS, INC.

Interest: Media company with cable system in Puerto Rico.

Service Areas:

- The FCC should modify the BTA for Puerto Rico to establish a second BTA encompassing the Mayaguez/Aguadilla-Ponce trading centers (this should be done for both broadband and narrowband PCS). (1-7)
 - ▶ Due to the size and mountainous terrain of the island, Puerto Rico is essentially split in half, comprising two commercial centers -- San Juan and Mayaguez-Ponce. Travel between these two zones is difficult and limited. (2-5)
 - ▶ Allocation of two BTAs will ensure that PCS service is accessible to everyone in Puerto Rico and will fulfill the FCC's goal of maximizing the benefits of having large and small service areas. (6)
 - ▶ Attaches maps indicating proposed subdivision and economic information about each region.

PERSONAL NETWORK SERVICES, CORP.

Interest: Hispanic-owned telecommunications company.

Band Plan:

- The PCS allocations fail to adequately consider competitive disadvantages that PCS providers -- especially those in smaller markets -- will face and, therefore, will not promote meaningful opportunity for designated entities. (2-6)
- The smaller markets will not support seven PCS licensees, especially given that there are already two cellular licensees and one ESMR licensee in each market. (5)
- PCS providers will face greater costs than their cellular competitors. (5-6)
- Supports Commissioner Barrett's plan to issue three 30 MHz MTA licenses and three 10 MHz BTA licenses, with one of each set aside for designated entities. (9)

Cellular Eligibility:

- The overlap for cellular carriers should be raised from 10 percent to at least 20, and perhaps 25-30, percent because such participation will not reduce competition. (9-10)

Ownership Limits:

- If the FCC does not reduce the number of PCS licenses per market, it should permit greater flexibility in spectrum aggregation; without such modifications, the 20 MHz block set aside for designated entities will not be able to compete with the big players in the spectrum aggregation process. (6-9)
- Proposes that the FCC revise its spectrum aggregation rules as follows: (1) PCS licensees may aggregate up to 60 MHz in BTAs with populations between 200,000 and 999,999; (2) cellular carriers may aggregate up to 20 MHz in their existing market within any BTA with a population of under 1 million; and (3) there should be no limit on spectrum aggregation in BTAs with a population of less than 200,000. (8)

Performance Requirements:

- The build-out requirements for BTAs should be reduced to permit BTA licensees to compete more effectively against MTA licensees and to satisfy the needs of specialized niche markets by allowing BTA licensees to serve 20 percent of the population within 5 years, 30 percent of the population within 7 years, and 50 percent of the population within 10 years. (10)

PMN, INC.

Interest: Consortium of local exchange carriers that holds interests in cellular licensees.

Cellular Eligibility:

- The FCC should modify its cellular eligibility and attribution rules to exempt limited partnership interests and consortia of interests, particularly those held by independent local exchange carriers. (2-7)
 - ▶ Two out of three Commissioners expressed reservations over the severity of the cellular eligibility restrictions. (3)
 - ▶ The FCC found that local exchange carriers should be unrestricted in providing PCS, given the benefits their participation could bring to the public, especially in rural areas. (4)
 - ▶ Limited partner interests in cellular licensees do not give rise to undue market power, even if several entities with such interests participate in a PCS licensee. There is a significant difference between a LEC holding a minority interest in several cellular systems and a cellular carrier that controls and operates such systems. (5)

POINT COMMUNICATIONS COMPANY

Interest: Cellular RSA licensee.

Band Plan:

- Since 20 MHz blocks are more than adequate to provide PCS service, the FCC should create four 20 MHz blocks in the lower 2 GHz band and two 20 MHz blocks in the upper 2 GHz band. (2)
- 30 MHz blocks are not needed to avoid anticipated high costs of microwave relocation because those costs will be but a tiny fraction of the total PCS infrastructure cost. (2)
- Under the FCC's adopted band plan, minorities and small businesses will not be able to compete against large cellular, ESMR, and PCS operators. The FCC should reserve at least two spectrum blocks for minorities and small businesses that are equivalent to the other available spectrum blocks. (5)

Service Areas:

- It is a mistake to rely upon Rand-McNally's trading areas particularly because of the large territory encompassed by western Major Trading Areas. The FCC should rely upon smaller service areas such as Basic Trading Areas or cellular's MSAs/RSAs. (4)
- Use of Rand-McNally's proprietary information should be discontinued because that company is charging premium prices for its material. (4)

Ownership Limits:

- A mobile service provider should be limited to a total of 45 MHz of spectrum in its area of operation. This spectrum cap should apply to all mobile spectrum including cellular, ESMR, SMR, and PCS. (3)

RADIOFONE, INC.

Interest: Radio common carrier.

Cellular Eligibility:

- Limiting cellular carriers to 10 MHz is not justified because cellular and PCS are not fungible services and cellular licensees cannot use a PCS license to thwart competition. (3-12)
- The cellular ownership restriction arbitrarily and capriciously discriminates against cellular licensees in violation of the APA. (16-18)
- The cellular restrictions violate the due process protections of the Fifth Amendment because the FCC's differential treatment of cellular and SMR providers is not justified. (18-19)
- The 10 percent cellular population overlap coverage standard and the 20 percent cellular ownership attribution standard are arbitrary and contrary to the public interest, and also fail to consider pro-competitive factors in the cellular industry, such as the pace of technological change. (12-16)